UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,561	08/28/2003	Necdet Uzun	CIS0189C1US	7599

33031 7590 09/10/2007		EXAMINER
CAMPBELL STEPHENSON LLP		BATES, KEVIN T
11401 CENTURY OAKS TERRACE		
BLDG. H, SUITE 250	ART UNIT	PAPER NUMBER
AUSTIN, TX 78758	2155	

MAIL DATE	DELIVERY MODE
09/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/650,561	UZUN ET AL.
	Examiner	Art Unit	
	Kevin Bates	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *67-126* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *67-126* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Amendment

This Office Action is in response to a communication made on August 13,

2007.

Claims 67, 72, 76, 70-80, 83, 85, 101, 110, 115, and 119 have been

amended.

Claims 67 – 126 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 67 – 125 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Knightly (2003/0163593) in view of Lahat (6201792).

Regarding claims 67, 101, and 110, Knightly teaches a method

comprising:

providing a first queue corresponding to a first media access control

(MAC) device to which data is to be transmitted over a network (Paragraph 48);

receiving data, from a local client, destined for a client of a first MAC

device of the plurality of MAC devices (Paragraph 48);

storing at least a portion of the data in a first queue corresponding to the

first MAC device (Paragraph 48);

receiving information indicating a need to change an amount of data being transmitted to the client of the first MAC device (Paragraph 47); and

selectively transmitting data stored in the first queue to the first MAC device and the client of the first MAC device; wherein a rate at which the selectively transmitting is performed is based at least in part on at least a portion of the information indicating the need to change the amount of data being transmitted to the client of the first MAC device (Paragraph 48).

Knightly does not explicitly indicate that the MAC device does not have a queue corresponding to each destination device.

Lahat teaches a system of having a solution for signaling pervious devices to throttle their communications that includes having output queues for each of the destination devices (Column 5, lines 26 – 43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Lahat's output queues in Knightly's system in order to help ensure all the destination devices are receiving fair weight when scheduling output packets along the network by using the queues per destination device.

Regarding claim 85, Knightly teaches an apparatus comprising:

a first media access control (MAC) device operable to be coupled to a network (Paragraph 7);

a buffer coupled to the first MAC device and operable to receive data from the first MAC device (Paragraph 46);

a packet processor coupled to the buffer (Paragraph 46);

a first plurality of queues, wherein each of the first plurality of queues

corresponds to a respective network station (Paragraph 48); and

at least one shaper circuit, the at least one shaper circuit being configured

to dequeue data stored in at least one of the first plurality of queues based at

least in part on at least a portion of information indicating a need to change an

amount of data being transmitted to the respective network station corresponding

to the at least one of the first plurality of queues (Paragraph 47-48).

Regarding claims 68, 102, 105, and 111, Knightly teaches the method of

claims 67, 101, and 110 further comprising: providing a second queue

corresponding to the first MAC device to which data is to be transmitted over the

network (Paragraph 48); storing at least another portion of the data destined for

the at least one of the first MAC device and the client of the first MAC device in

the second queue (Paragraph 48); and selectively transmitting data stored in the

second queue to the at least one of the first MAC device and the client of the first

MAC device (Paragraph 48); wherein a rate at which the selectively transmitting

of data stored in the second queue is performed is based at least in part on one

of: the at least a portion of the information indicating the need to change the

amount of data being transmitted to the at least one of the first MAC device and

the client of the first MAC device; and at least another portion of the information

indicating the need to change the amount of data being transmitted to the at least

one of the first MAC device and the client of the first MAC device (Paragraph 47-

48).

Regarding claims 69, 92, 103, and 112, Knightly teaches the method of

claims 68, 85, 102, and 111 wherein the first queue is for data having a first

priority level, and wherein the second queue is for data having a second priority

level (Paragraph 48).

Regarding claims 70, 93, and 113, Knightly teaches the method of

claims 67, 92, and 110 further comprising: providing a second queue

corresponding to a second MAC device to which data is to be transmitted over

the network (Paragraph 48); receiving data destined for at least one of the

second MAC device and a client of the second MAC device (Paragraph 48);

storing at least a portion of the data destined for the at least one of the second

MAC device and the client of the second MAC device in the second queue

(Paragraph 48, wherein traffic from the second MAC device that is classified as B

and C class are placed in the second queue); and selectively transmitting data

stored in the second queue to the at least one of the second MAC device and the

client of the second MAC device; wherein a rate at which the selectively

transmitting of data stored in the second queue is performed is based at least in

part on information indicating a need to change an amount of data being

transmitted to the at least one of the second MAC device and the client of the

second MAC device (Paragraph 47-48).

Regarding claims 71 and 114, Knightly teaches the method of claims 67

and 110 wherein the first queue is provided in a memory coupled to at least one

of another MAC device and a client of the another MAC device (Paragraph 48).

Regarding claims 72, 96, and 115, Knightly teaches the method of

claims 67, 85, and 110 wherein the first queue is provided one of a memory of a

second MAC device and a client of the a memory of a second MAC device

(Paragraph 48, wherein each MAC device in the network has a first queue).

Regarding claims 74 and 117, Knightly teaches the method of claims 67

and 110 wherein the information indicating a need to change the amount of data

being transmitted to the at least one of the first MAC device and the client of the

first MAC device is received from at least one of the first MAC device, the client

of the first MAC device, another MAC device, and a client of the another MAC

device (Paragraph 160 and 163).

Regarding claims 75 and 118, Knightly teaches the method of claims 67

and 110 wherein the selectively transmitting data stored in the first queue further

comprises selectively transmitting data stored in the first queue in one of a first

egress direction and a second egress direction (Paragraph 48).

Regarding claims 76, 98, and 119, Knightly teaches the method of

claims 67, 85, and 110 further comprising: receiving information indicating a need

to change an amount of data being transmitted on a first network link between

the first MAC device and another MAC device; selectively transmitting data being

selectively transmitted to the at least one of the first MAC device and the client of

the first MAC device; wherein another rate at which the selectively transmitting of

data being selectively transmitted is performed is based at least in part on at

least a portion of the information indicating the need to change the amount of

data being transmitted on the first network link (Paragraph 47 and 166).

Regarding claims 79 and 122, Knightly teaches the method of claims 67

and 110 further comprising: transmitting information indicating a need to change

an amount of data being transmitted to at least one of another MAC device and a

client of the another MAC device (Paragraph 47).

Regarding claims 80, 87, 108, and 123, Knightly teaches the method of

claims 79, 85, 101, and 122 further comprising: determining an extent to which a

data buffer associated with the client of the another MAC device contains data;

and preparing the information indicating the need to change the amount of data

being transmitted to the at least one of the another MAC device and the client of

the another MAC device (Paragraph 160 and 166).

Regarding claims 73, 77, 89, 95, 99, 104, 106, 116, and 120, Knightly

teaches the method of claims 67, 76, 87, 98, 101, 105, and 110 wherein the

information indicating a need to change the amount of data being transmitted to

the at least one of the first MAC device and the client of the first MAC device

includes at least one of: a MAC device address, a data transmission rate, a ramp

factor, a threshold value, a network link bandwidth value, and a flag (Paragarph

160 and 163, a data transmission rate).

Regarding claims 78, 88, 90, 107, and 121, Knightly teaches the method

of claims 67, 85, 87, 101, and 110 further comprising: receiving information

indicating a need to change an amount of data being transmitted on a first

network link between the first MAC device and another MAC device, wherein the

rate at which the selectively transmitting is performed is further based at least in

part on at least a portion of the information indicating the need to change the

amount of data being transmitted on the first network link (Paragarph 47, 160,

and 163).

Regarding claims 81, 86, and 124, Knightly teaches the method of

claims 67, 85, and 110 wherein the network is at least one of a metropolitan area

network (MAN) and a resilient packet ring (RPR) network (Paragraph 7).

Regarding claims 82, 91, and 125, Knightly teaches the method of

claims 67, 85, and 110 wherein the information indicating a need to change an

amount of data being transmitted to the at least one of the first MAC device and

the client of the first MAC device is received in a resilient packet ring (RPR)

fairness message (Paragraph 10).

Regarding claims 83 and 97, Knightly teaches the method of claim 67

encoded in a computer readable medium as instructions executable on a

processor, the computer readable medium being one of an electronic storage

medium, a magnetic storage medium, and an optical storage medium (Paragraph

46, wherein the processor carries out the algorithm).

Regarding claims 84, 100, 109, and 126, Knightly teaches the method of

claims 67, 85, 101, and 110 wherein the information indicating the need to

change the amount of data being transmitted to the at least one of the first MAC

device and the client of the first MAC device further comprises at least one of:

information indicating the need to reduce the amount of data being transmitted,

and information indicating the need to increase the amount of data being

transmitted (Paragraph 67).

Regarding claim 88, Knightly teaches the apparatus of claim 87 wherein at least one of the first MAC device, the buffer, the packet processor, the at least one shaper circuit, and the comparison circuit is further configured to prepare a message including information indicating a need to change an amount of data being transmitted to a network station that includes the first MAC device (Paragraph 47).

Regarding claim 94, Knightly teaches the apparatus of claim 93 wherein the at least a portion of the information indicating the need to change the amount of data being transmitted to the respective network station corresponding to the at least one of the second plurality of queues is the same as the at least a portion of the information indicating the need to change the amount of data being transmitted to the respective network station corresponding to the at least one of the first plurality of queues (Paragraph 48).

Response to Arguments

Applicant's arguments with respect to claims 67 - 126 have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 5719853 issued to Ikeda, because it teaches sending messages to nodes in a network to throttle their communications.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from
the Patent Application Information Retrieval (PAIR) system. Status information
for published applications may be obtained from either Private PAIR or Public
PAIR. Status information for unpublished applications is available through
Private PAIR only. For more information about the PAIR system, see http://pair-
direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-
free). If you would like assistance from a USPTO Customer Service
Representative or access to the automated information system, call 800-786-
9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Bates
August 21, 2007

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER